

## Medium 199 with Hank's Salts

### Liquid Media

M199 with HBSS<sup>(2)</sup>  
without L-Glutamine  
with 0.35 g/L NaHCO<sub>3</sub>    500 ml P04-07753

M199 with HBSS<sup>(2)</sup>  
with L-Glutamine  
with 25 mM Hepes  
with 0.35 g/L NaHCO<sub>3</sub>    500 ml P04-07450

### Special Media

M199 with HBSS (10X)<sup>(2)</sup>  
without L-Glutamine  
without NaHCO<sub>3</sub>            500 ml P04-07600

### Powder Media

M199 with HBSS<sup>(1)</sup>  
with L-Glutamine            10 L    P03-2110  
without NaHCO<sub>3</sub>            50 L    P03-2150

### Composition

	Components	mg/L
<b>Inorganic Salts</b>	Calcium chloride x2H <sub>2</sub> O	185.45
	Iron(III) nitrate x 9H <sub>2</sub> O	0.72
	Magnesium sulfate dried	139.68
	Potassium chloride	400.00
	Potassium dihydrogen phosphate	60.00
	Sodium acetate x 3H <sub>2</sub> O	83.00
	Sodium chloride	8,000.00
	di-Sodium hydrogen phosphate	47.68
<b>Other Components</b>	Adenine sulfate	10.00
	AMP	0.20
	ATP	1.00
	Cholesterol	0.20
	2'-Deoxyribose	0.50
	D(+)-Glucose anhydrous	1,000.00
	Glutathione (red.)	0.05
	Guanine x HCl	0.30
	Hepes	5,958.00
	Hypoxanthine	0.30
	Phenol red	10.00
	D-Ribose	0.50
	Thymine	0.30
	Tween 80	4.90
	Uracil	0.30
Xanthine	0.30	

<b>Amino acids</b>	L-Alanine	25.00
	L-Arginine x HCl	70.00
	L-Aspartic acid	30.00
	L-Cysteine x HCl x H <sub>2</sub> O	0.10
	L-Cystine	20.00
	L-Glutamine	100.00
	L-Glutamic acid	67.00
	Glycine	50.00
	L-Histidine x HCl x H <sub>2</sub> O	21.88
	L-Hydroxyproline	10.00
	L-Isoleucine	20.00
	L-Leucine	60.00
	L-Lysine x HCl	70.00
	L-Methionine	15.00
	L-Phenylalanine	25.00
	L-Proline	40.00
	L-Serine	25.00
	L-Threonine	30.00
	L-Tryptophan	10.00
L-Tyrosine	40.00	
L-Valine	25.00	
<b>Vitamins</b>	p-Aminobenzoic acid	0.05
	Ascorbic acid	0.05
	D(+)-Biotin	0.01
	Calciferol	0.10
	D-Calcium pantothenate	0.01
	Choline chloride	0.50
	Folic acid	0.01
	myo-Inositol	0.05
	Menadione	0.01
	Nicotinic acid	0.025
	Nicotinamide	0.025
	Pyridoxal x HCl	0.025
	Pyridoxol x HCl	0.025
	Riboflavin	0.01
DL- $\alpha$ -Tocopherol phosphate-Na <sub>2</sub>	0.01	
Thiamine x HCl	0.01	
Vitamin A acetate	0.14	

(1) usually on stock, (2) minimum order 10 l, (3) available on request